

Bongki Moon's Publications

Flash Memory Database Systems

- Dynamic In-Page Logging for Flash-Aware B-Tree Index,
Gap-Joo Na and Sang-Won Lee and Bongki Moon, Proceedings of the 18th International Conference on Information and Knowledge Management (CIKM'09), pages 1485-1488, Hong Kong, China, November 2009 (poster presentation).
- Advances in Flash Memory SSD Technology for Enterprise Database Applications
Sang-Won Lee, Bongki Moon and Chanik Park, ACM SIGMOD International Conference on Management of Data, pages 863-870, Providence, Rhode Island, June, 2009 (Industrial Track).
- In-Page Logging B-Tree for Flash Memory
Gap-Joo Na, Bongki Moon and Sang-Won Lee, International Conference on Database Systems for Advanced Applications, pages 755-758, Brisbane, Australia, April, 2009 (demo paper).
- A Case for Flash Memory SSD in Enterprise Database Applications
Sang-Won Lee, Bongki Moon, Chanik Park, Jae-Myung Kim and Sang-Woo Kim, ACM SIGMOD International Conference on Management of Data, pages 1075-1086, Vancouver, Canada, June, 2008 (Industrial Track). (Presentation slides)
- Design of Flash-Based DBMS: An In-Page Logging Approach
Sang-Won Lee and Bongki Moon, ACM SIGMOD International Conference on Management of Data, pages 55-66, Beijing, China, June, 2007. (Presentation slides)

XML Indexing, Filtering, Streaming and Query Processing

- Locating XML Documents in a Peer-to-Peer Network Using Distributed Hash Tables
Praveen Rao and Bongki Moon, IEEE Transactions on Knowledge and Data Engineering, 21(12):1737-1752, December 2009.
- Bitmap Indexes for Relational XML Twig Query Processing,
Kyong-Ha Lee and Bongki Moon, Proceedings of the 18th International Conference on Information and Knowledge Management (CIKM'09), pages 465-474, Hong Kong, China, November 2009.
- Fast XML Document Filtering by Sequencing Twig Patterns
Joonho Kwon, Praveen Rao, Bongki Moon and Sukho Lee, ACM Transactions on Internet Technology, 9(4):Article 13, September 2009.
- A Data Parallel Algorithm for XML DOM Parsing
Bhavik Shar, Praveen Rao, Bongki Moon and Mohan Rajagopalan, Sixth International XML Database Symposium (XSym 2009), pages 75-90, Lyon, France, August 2009.
- An Internet-Scale Service for Publishing and Locating XML Documents,
Praveen Rao and Bongki Moon, Proceedings of the 25th International Conference on Data Engineering (ICDE'2009), pages 1459-1462, Shanghai, China, March 2009 (demo paper).
- Value-Based Predicate Filtering of XML Document,
Joonho Kwon, Praveen Rao, Bongki Moon and Sukho Lee, Data and Knowledge Engineering, 67(1):51-73, October 2008.
- Net-X: Unified Data-Centric Internet Services,
Praveen Rao, Justin Cappos, Varun Khare, Bongki Moon and Beichuan Zhang, Third

- International Workshop on Networking Meets Databases (NetDB'07), Cambridge, MA, April, 2007.
- A Clustering Method Based on Path Similarities of XML Data, *Ilhwan Choi, Bongki Moon and Hyoung-Joo Kim*, Data and Knowledge Engineering, 60 (2):361-376, February 2007.
 - Sequencing XML Data and Query Twigs for Fast Pattern Matching, *Praveen R. Rao and Bongki Moon*, ACM Transactions on Database Systems, 31(1):299-345, March 2006.
 - SketchTree: Approximate Tree Pattern Counts over Streaming Labeled Trees, *Praveen R. Rao and Bongki Moon*, Proceedings of the 22nd International Conference on Data Engineering (ICDE'2006), Atlanta, GA, April 2006.
 - FiST: Scalable XML Document Filtering by Sequencing Twig Patterns, *Joonho Kwon, Praveen R. Rao, Bongki Moon and Sukho Lee*, Proceedings of the 31th International Conference on Very Large Databases (VLDB'2005), pages 217-228, Trondheim, Norway, August 2005.
 - PRIX: Indexing and Querying XML Using Prüfer Sequences, *Praveen R. Rao and Bongki Moon*, Proceedings of the 20th International Conference on Data Engineering (ICDE'2004), pages 288-299, Boston, MA, March 2004.
 - XISS/R: XML Indexing and Storage System Using RDBMS, *Philip J. Harding, Quanzhong Li and Bongki Moon*, Proceedings of the 29th International Conference on Very Large Databases (VLDB'2003), pages 1073-1076, Berlin, Germany, September 2003. (demo paper)
 - Partition Based Path Join Algorithms for XML Data, *Quanzhong Li and Bongki Moon*, Proceedings of the 14th International Conference on Database and Expert Systems Applications (DEXA'2003), pages 160-170, Prague, Czech Republic, September 2003.
 - Indexing and Querying XML Data for Regular Path Expressions, *Quanzhong Li and Bongki Moon*, Proceedings of the 27th International Conference on Very Large Databases (VLDB'2001), pages 361-370, Rome, Italy, September 2001.

Time Series, Temporal and Mobile Databases

- Skyline Index for Time Series Data, *Quanzhong Li, Ines Fernando Vega Lopez and Bongki Moon*, IEEE Transactions on Knowledge and Data Engineering, 16(6):669-684, June 2004.
- Adaptive Cell-Based Index for Moving Objects, *Wonik Choi, Bongki Moon and Sukho Lee*, Data and Knowledge Engineering 48(1):75-101, January 2004.
- Main Memory-Based Algorithms for Efficient Parallel Aggregation for Temporal Databases, *Dengfeng Gao, Jose Alvin G. Gendrano, Bongki Moon, Richard T. Snodgrass, Minseok Park, Bruce C. Huang and Jim M. Rodrigue*, Distributed and Parallel Database 16(2):123-163, September 2004.
- Efficient Algorithms for Large-Scale Temporal Aggregation, *Bongki Moon, Ines Fernando Vega Lopez and Vijaykumar Immanuel*, IEEE Transactions on Knowledge and Data Engineering, 15(3):744-759, May/June 2003.
- Scalable Algorithms for Large Temporal Aggregation, *Bongki Moon, Ines Fernando Vega Lopez and Vijaykumar Immanuel*, Proceedings of the 16th International Conference on Data Engineering (ICDE'2000), pages 145-154, San Diego, CA, March 2000.
- Parallel Algorithms for Computing Temporal Aggregates, *Jose Alvin G. Gendrano, Bruce C. Huang, Jim M. Rodrigue, Bongki Moon and*

Richard T. Snodgrass, Proceedings of the 15th International Conference on Data Engineering (ICDE'1999), pages 418-427, Sydney Australia, March 1999.

Spatial and Multidimensional Databases

- ❶ Spatiotemporal Aggregate Computation: A Survey,
Ines Fernando Vega Lopez, Richard Snodgrass and Bongki Moon, IEEE Transactions on Knowledge and Data Engineering, 17(2):271-286, February 2005.
- ❷ Bulk Insertion for R-tree by Seeded Clustering (Journal version),
Taewon Lee, Bongki Moon and Sukho Lee, Proceedings of the 14th International Conference on Database and Expert Systems Applications (DEXA'2003), pages 129-138, Prague, Czech Republic, September 2003.
- ❸ Adaptive and Incremental Processing for Distance Join Queries,
Hyoseop Shin, Bongki Moon and Sukho Lee, IEEE Transactions on Knowledge and Data Engineering, 15(6):1561-1578, November/December, 2003.
- ❹ Partition-Based Similarity Join Processing in High Dimensional Data Spaces,
Hyoseop Shin, Bongki Moon and Sukho Lee, Proceedings of the 13th International Conference on Database and Expert Systems Applications (DEXA'2002), Aix-en-Provence, France, September 2002.
- ❺ Tie-Breaking Strategies for Fast Distance Join Processing,
Hyoseop Shin, Bongki Moon and Sukho Lee, Data and Knowledge Engineering, 41(1):67-83, April, 2002.
- ❻ Adaptive Multi-Stage Distance Join Processing,
Hyoseop Shin, Bongki Moon, and Sukho Lee, Proceedings of the 2000 ACM SIGMOD International Conference on Management of Data, pages 343-354, Dallas, TX, May, 2000.
- ❼ Analysis of the Clustering Properties of the Hilbert Space-Filling Curve,
Bongki Moon, H.V. Jagadish, Christos Faloutsos and Joel H. Saltz, IEEE Transactions on Knowledge and Data Engineering, 13(1):124-141, January/February, 2001.
- ❽ Scalability Analysis of Declustering Methods for Multidimensional Range Queries,
Bongki Moon and Joel H. Saltz, IEEE Transactions on Knowledge and Data Engineering, 10(2):310-327, March/April 1998.
- ❾ A Case for Parallelism in Data Warehousing and OLAP,
Anindya Datta, Bongki Moon and Helen Thomas, Ninth International Workshop on Database and Expert Systems Applications (DEXA'98), pages 226-231, Vienna, Austria, August 1998.
- ❿ Study of Scalable Declustering Algorithms for Parallel Grid Files,
Bongki Moon, Anurag Acharya and Joel Saltz, Proceedings of the 10th International Parallel Processing Symposium, pages 434-440, Honolulu, Hawaii, April 1996. (*Extended version*).

Scalable Web and Database Servers

- ❶ Distributed Cooperative Apache Web Server,
Quanzhong Li and Bongki Moon, Proceedings of the 10th International World Wide Web Conference (WWW'2001), pages 555-564, Hong Kong, May, 2001. *Best Student Paper Award*.
- ❷ Distributed Cooperative Web Servers,
Scott M. Baker and Bongki Moon, Computer Networks and ISDN Systems, 31(11-16):1215-1229, 1999. Also appeared in the Proceedings of the 8th International World Wide Web Conference, pages 137-151, Toronto, Canada, May, 1999.
- ❸ The Virtual Microscope,

- Renato Ferreira, Bongki Moon, Jim Humphries, Alan Sussman, Joel Saltz, Robert Miller, Angelo Demarzo*, American Medical Informatics Association, 1997 Annual Fall Symposium, Nashville, TN, October 1997, *Best Application Paper* award.
- *The Design and Evaluation of a High-Performance Earth Science Database*, *Carter T. Shock, Chialin Chang, Bongki Moon, Anurag Acharya, Larry Davis, Joel Saltz, Alan Sussman*, Parallel Computing for the Special Issue on Parallel Data Servers and Applications, 24(1):65-89, January 1998.
 - *Titan: a High-Performance Remote-sensing Database*, *Chialin Chang, Bongki Moon, Anurag Acharya, Carter Shock, Alan Sussman, Joel Saltz*, Proceedings of the 13th International Conference on Data Engineering (ICDE'97), pages 375-384, Birmingham, U.K., April 1997.

High Performance Computing

- *Runtime and Language Support for Compiling Adaptive Irregular Programs on Distributed Memory Machines*, *Yuan-Shin Hwang, Bongki Moon, Ravi Ponnusamy, Shamik Sharma, Raja Das and Joel Saltz*, Software Practice & Experience, 25(6):597-621, June 1995.
- *Parallel Monte Carlo Simulation of Three-Dimensional Flow over a Flat Plate*, *R. P. Nance, R. G. Wilmoth, B. Moon, H. A. Hassan and J. Saltz*, AIAA Journal of Thermophysics and Heat Transfer, 9(3), July/Sep 1995.
- *Index Translation Schemes for Adaptive Computations on Distributed Memory Multicomputers*, *Bongki Moon, Mustafa Uysal and Joel Saltz*, Proceedings of the 9th International Parallel Processing Symposium, pages 812-819, Santa Barbara, CA, Apr. 1995.
- *Runtime Support and Dynamic Load Balancing Strategies for Structured Adaptive Applications*, *Bongki Moon, Gopal Patnaik, Robert Bennett, David Fyfe, Alan Sussman, Craig Douglas, Joel Saltz and K. Kailasanath*, Proceedings of the Seventh SIAM Conference on Parallel Processing for Scientific Computing, San Francisco, CA, Feb. 1995.
- *Run-time and Compile-time Support for Adaptive Irregular Problems*, *Shamik D. Sharma, Ravi Ponnusamy, Bongki Moon, Yuan-Shin Hwang, Raja Das, Joel Saltz*, Supercomputing, pp 97-106, Washington D.C., Nov. 1994.
- *Adaptive Runtime Support for Direct Simulation Monte Carlo Methods on Distributed Memory Architectures*, *Bongki Moon and Joel Saltz*, Scalable High Performance Computing Conference, pp 176-183, Knoxville, TN, May 1994.
- *Programming Irregular Applications: Runtime Support, Compilation and Tools*, *Joel Saltz, Bongki Moon and others*, Advances in Computers, volume 45, edited by Marvin V. Zelkowitz, Academic Press, San Diego, California, 1997.

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